NOTICE OF REVISION (NOR)

THIS REVISION DESCRIBED BELOW HAS BEEN AUTHORIZED FOR THE DOCUMENT LISTED.

1. DATE *(YYMMDD)* 031021

Form Approved OMB No. 0704-0188

2. PROCURING ACTIVITY NO.

3. DODAAC

4. ORIGINATOR	b. ADDRESS *(Street, City, State, Zip Code)*	5. CAGE CODE	6. NOR NO.
a. TYPED NAME *(First, Middle Initial, Last)* Gene Ebert	Defense Supply Center, Columbus P. O. Box 3990 Columbus, OH 43216-5000	14933 7. CAGE CODE 14933	5950-R001-02 8. DOCUMENT NO. **84127**

9. TITLE OF DOCUMENT	10. REVISION LETTER		11. ECP NO.
	a. CURRENT	b. NEW	
SHIELDING BEADS, FERRITE	B	C	No users listed.

12. CONFIGURATION ITEM (OR SYSTEM) TO WHICH ECP APPLIES

All

13. DESCRIPTION OF REVISION

Page 1: Add note: “Previous CAGE 14933 superseded by 037Z3”, “INACTIVE FOR NEW DESIGN”.

Page 7: Change paragraph 6.4 to 6.5.

Insert the following; 6.4 Supersession data. Devices covered by this drawing are replaced by Commercial Item Description stated in table II.

Table II. Supersession data.

MILITARY P/N	Superseded by PIN	MILITARY P/N	Superseded by PIN	MILITARY P/N	Superseded by PIN	MILITARY P/N	Superseded by PIN
84127-01	AA55483-001	84127-10	AA55483-010	84127-19	AA55483-019	84127-28	AA55483-028
84127-02	AA55483-002	84127-11	AA55483-011	84127-20	AA55483-020	84127-29	AA55483-029
84127-03	AA55483-003	84127-12	AA55483-012	84127-21	AA55483-021	84127-30	AA55483-030
84127-04	AA55483-004	84127-13	AA55483-013	84127-22	AA55483-022	84127-31	AA55483-031
84127-05	AA55483-005	84127-14	AA55483-014	84127-23	AA55483-023	84127-32	AA55483-032
84127-06	AA55483-006	84127-15	AA55483-015	84127-24	AA55483-024	84127-33	AA55483-033
84127-07	AA55483-007	84127-16	AA55483-016	84127-25	AA55483-025	84127-34	AA55483-034
84127-08	AA55483-008	84127-17	AA58483-017	84127-26	AA55483-026	84127-35	AA55483-035
84127-09	AA55483-009	84127-18	AA55483-018	84127-27	AA55483-027	84127-36	AA55483-036

14. THIS SECTION FOR GOVERNMENT USE ONLY

a. *(X one)*		
	X	(1) Existing document supplemented by the NOR may be used in manufacture.
		(2) Revised document must be received before manufacturer may incorporate this change.
		(3) Custodian of master document shall make above revision and furnish revised document.

b. ACTIVITY AUTHORIZED TO APPROVE CHANGE FOR GOVERNMENT	c. TYPED NAME *(First, Middle Initial, Last)*
DSCC-VAT	KENDALL COTTONGIM

d. TITLE	e. SIGNATURE	f. DATE SIGNED *(YYMMDD)*
CHIEF, ELECTRONICS COMPONENTS TEAM	KENDALL COTTONGIM	031021

15a. ACTIVITY ACCOMPLISHING REVISION	b. REVISION COMPLETED *(Signature)*	c. DATE SIGNED *(YYMMDD)*
DSCC-VAT	Gene Ebert	031021

NOTICE OF REVISION (NOR)

(See MIL-STD-480 for instructions)

This revision described below has been authorized for the document listed.

DATE (YYMMDD)	Form Approved OMB No. 0704-0188
92/09/16	

1. ORIGINATOR NAME AND ADDRESS	2. CAGE CODE	3. NOR NO.
Defense Electronics Supply Center Dayton, Ohio 45444-5283	14933	5950-R001-92
	4. CAGE CODE 14933	5. DOCUMENT NO. 84127
6. TITLE OF DOCUMENT SHIELDING BEADS, FERRITE	7. REVISION LETTER (Current) A	(New) B
	8. ECP NO. NONE	

9. CONFIGURATION ITEM (OR SYSTEM) TO WHICH ECP APPLIES

10. DESCRIPTION OF REVISION

Sheet 2: Paragraph 3.3, delete the last sentence.

11. THIS SECTION FOR GOVERNMENT USE ONLY

a. CHECK ONE

[X] EXISTING DOCUMENT SUPPLEMENTED BY THIS NOR MAY BE USED IN MANUFACTURE.

[ ] REVISED DOCUMENT MUST BE RECEIVED BEFORE MANUFACTURER MAY INCORPORATE THIS CHANGE.

[ ] CUSTODIAN OF MASTER DOCUMENT SHALL MAKE ABOVE REVISION AND FURNISH REVISED DOCUMENT TO:

b. ACTIVITY AUTHORIZED TO APPROVE CHANGE FOR GOVERNMENT	SIGNATURE AND TITLE	DATE (YYMMDD)
DESC-EMM	Edward M. Bach CHIEF, MATERIALS AND PARTS BRANCH	92/09/16
12. ACTIVITY ACCOMPLISHING REVISION	REVISION COMPLETED (Signature)	DATE (YYMMDD)
DESC-EMM	Ken R. Bymer	92/09/16

REVISIONS			
LTR	DESCRIPTION	DATE	APPROVED
A	Page 2- revised paragraphs 3.1.2.1, 3.1.2.2, and 3.4.1 Page 3- changed "C" dim, dash number 8, 9 Page 4- changed "C" dim, dash number 15 thru 34 Page 4- changed "A and B" dimensions, dash number 28 thru 34 Page 4- changed A, B, and C dimensions, dash number 26. Page 4- added new dash numbers 35 and 36. Page 5- changed impedance value dash number 01 thru 26 Page 5- added new material requirements, Table I; dash number 26 Page 6- changed impedance value dash number 27 thru 36 Page 6- added new dash numbers 35 and 36, Table I. Page 7- corrected part number for dash numbers 04,05,08, and 09 Page 8- moved P/N 5659065/4A6 and /4B from dash numbers 19 and 20, inserted new P/N's 35 and 36 Page 8- moved P/N 5659065/4A from dash number 18, inserted dash number 26 Editorial changes throughout	4-7-86	CLB

Prepared in accordance with DOD-STD-100

Selected item drawing

REV									
PAGE									
REV STATUS	REV	A	A	A	A	A	A	A	A
OF PAGES	PAGES	1	2	3	4	5	6	7	8

Original date of drawing:

26 July 1985

PREPARED BY Richard Hawkins

CHECKED BY Donald E. Morgan

APPROVED BY Lucas R. Jones

DEFENSE ELECTRONICS SUPPLY CENTER
DAYTON, OHIO

TITLE SHIELDING BEADS, FERRITE

SIZE A

CODE IDENT. NO. 14933

DWG NO. 84127

REV A

PAGE 1 OF 8

DESC FORM 144 MAR 76 AMSC N/A

5950-E 001

DISTRIBUTION STATEMENT A. Approved for public release; distribution is unlimited.

1. SCOPE

1.1 Scope. This drawing describes the requirements for a family of shielding beads made of ferrite material.

1.2 Part number. The complete part number shall be as shown in the following example:

84127	-01
Drawing number	Dash number (see figure 1 and and table I)

2. APPLICABLE DOCUMENTS

2.1 Government standard. Unless otherwise specified, the following standard, of the issue listed in that issue of the Department of Defense Index of Specifications and Standards specified in the solicitation, forms a part of this drawing to the extent specified herein.

STANDARD

MILITARY

MIL-STD-105 - Sampling Procedures and Tables for Inspection by Attributes.

(Copies of the standard required by manufacturers in connection with specific acquisition functions should be obtained from the contracting activity or as directed by the contracting activity.)

3. REQUIREMENTS

3.1 Design and construction.

3.1.1 Dimensions. See figure 1.

3.1.2 Material requirements. See table I.

3.1.2.1 Initial permeability (μo). Initial permeability shall be as specified in table I, from 20°C to 25°C as measured toroidally.

3.1.2.2 Saturation flux density (^{B}s). Saturation flux density shall be as specified in table I, from 20°C to 25°C as measured torodially.

3.1.2.3 Curie temperature (T_C). Curie temperature shall be as specified in table I.

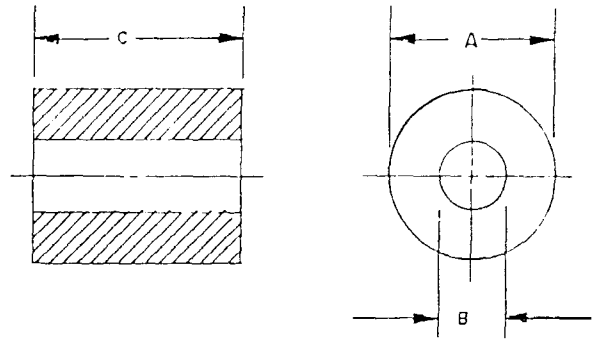
3.1.3 Operating temperature range. The operating temperature range shall be -55°C to +125°C.

3.2 Marking. Parts shall not be marked. The unit package shall be marked with the drawing part number, manufacturer's part number, and source code.

3.3 Workmanship. Shielding beads shall be processed in such a manner as to be uniform in quality and shall be free from surface and finish flaws that will affect life and serviceability. Shielding beads shall be finished smooth and shall have rounded edges with no evidence of chipping, cracking, or burrs.

3.4 Electrical ratings.

3.4.1 Impedance (Ω). Minimum impedance shall be as specified in table I. When μo is 2,500, it is measured at 25 MHz. The remaining impedance is measured at 100 MHz. All impedances are measured with 1 turn of wire through the ferrite bead.



Dash No.	Dimensions		
	A	B	C
01	.038 ±.001	.020 +.002 -.001	.195 ±.003
	(.97 ±0.03)	(.51 +0.05 -0.03)	(4.95 ±0.08)
02	.041 +.002 -.001	.027 ±.002	.159 ±.004
	(1.04 +0.05 -0.03	(.69 ±0.05)	(4.04 ±0.10)
03	.054 ±.002	.029 ±.001	.090 ±.005
	(1.37 ±0.05)	(0.74 ±0.03)	(2.29 ±0.13)
04	.080 ±.004	.035 +.003 -.002	.106 ±.006
	(2.03 ±0.10)	(0.89 +0.08 -0.05)	(2.69 ±0.15)
05	.072 ±.004	.043 ±.002	.415 ±.015
	(1.83 ±0.10)	(1.09 ±0.05)	(10.54 ±0.38)
06	.072 ±.004	.043 ±.002	.415 ±.015
	(1.83 ±0.10)	(1.09 ±0.05)	(10.54 ±0.38)
07	.076 ±.002	.043 ±.002	.060 ±.007
	(1.93 ±0.05)	(1.09 ±0.05)	(1.52 ±0.18)
08	.076 ±.002	.043 ±.002	.150 ±.010
	(1.93 ±0.05)	(1.09 ±0.05)	(3.81 ±0.25)
09	.076 ±.002	.043 ±.002	.150 ±.010
	(1.93 ±0.05)	(1.09 ±0.05)	(3.81 ±0.25)
10	.112 ±.005	.068 ±.003	.410 ±.010
	(2.84 ±0.13)	(1.73 ±0.08)	(10.41 ±0.25)

FIGURE 1. Dimensions and configuration.

Case No.	Dimensions A	B	C	Case No.	Dimensions A	B	C
11	.138 ±.010	.031 ±.002	.175 ±.015	24	.138 ±.008	.063 ±.004	.118 +.020 -.000
12	"	"	.350 ±.020	25	.200 ±.010	.062 ±.005	.250 ±.010
13	.138 ±.008	.047 +.008 -.000	.050 ±.005	26	.138 ±.008	.047 +.008 -.000	.118 +.020 -.000
14	"	"	.118 +.020 -.000	27	.200 ±.010	.062 ±.005	.437 ±.015
15	"	"	.160 ±.010	28	.296 ±.005	.094 ±.005	.297 ±.010
16	"	"	"	29	"	"	"
17	"	"	.236 ±.010	30	"	"	"
18	"	"	"	31	.375 ±.010	.193 ±.007	.410 ±.010
19	"	"	"	32	"	"	"
20	"	"	.500 ±.015	33	.380 ±.010	.195 +.010 -.005	.190 ±.010
21	.138 ±.008	.047 +.008 -.000	.500 ±.015	34	.562 ±.020	.250 ±.010	1.125 ±.030
22	.138 ±.008	.047 +.008 -.000	.500 ±.015	35	.138 ±.008	.047 +.008 -.000	.118 +.020 -.000
23	"	"	.236 ±.010	36	.138 ±.008	.047 +.008 -.000	.118 +.020 -.000

Inches	mm	Inches	mm	Inches	mm	Inches	mm	Inches	mm	Inches	mm
.001	0.03	.029	0.74	.058	1.47	.112	2.84	.193	4.90	.350	8.89
.002	0.05	.030	0.76	.059	1.50	.118	3.00	.195	4.95	.375	9.53
.003	0.08	.031	0.79	.060	1.52	.120	3.05	.200	5.08	.380	9.65
.004	0.10	.035	0.89	.062	1.57	.128	3.25	.230	5.84	.396	10.06
.005	0.13	.038	0.97	.063	1.60	.138	3.51	.236	5.99	.410	.0.41
.006	0.15	.041	1.04	.068	1.73	.146	3.71	.250	6.35	.415	10.54
.007	0.18	.043	1.09	.072	1.83	.150	3.81	.256	6.50	.437	11.10
.008	0.20	.047	1.19	.076	1.93	.159	4.04	.296	7.52	.440	11.18
.010	0.25	.050	1.27	.080	2.03	.160	4.06	.297	7.54	.450	11.43
.015	0.38	.051	1.30	.090	2.29	.175	4.45	.316	8.03	.500	12.70
.020	0.51	.054	1.37	.094	2.39	.190	4.83	.323	8.20	.562	14.27
.027	0.69	.057	1.45	.106	2.69	.192	4.88	.330	8.38	1.125	28.58

NOTES:
1. Dimensions are in inches.
2. Metric equivalents are given for general information only.

FIGURE 1. Dimensions and configuration - Continued.

TABLE I. Typical material requirements.

Dash number 84127-	μ_o (±20%)	B_S (gauss)	Minimum T_C (°C)	Impedance (Ω)(min)
01	2,500	4,000	160	26.4
02	2,500	4,000	160	15
03	2,500	4,000	160	11.6
04	850	2,750	130	22
05	850	2,750	130	38.4
06	2,500	4,000	160	38.4
07	2,500	4,000	160	8.4
08	850	2,750	130	10
09	2,500	4,000	160	8.4
10	2,500	4,000	160	44
11	850	2,750	130	56
12	850	2,750	130	106
13	850	2,750	130	13
14	850	2,750	130	30.9
15	850	2,750	130	36.6
15	2,500	4,000	160	32
17	850	2,750	130	48
18	250	2,200	210	48
19	2,500	4,000	160	41.6
20	850	2,750	130	100
21	250	2,200	210	69.7
22	2,500	4,000	160	92
23	850	2,750	130	48
24	850	2,750	130	28
25	850	2,750	130	62.9
26	600	2,900	130	31

TABLE I. Typical material requirements - Continued.

Dash number	μ_o (±20%)	B_s (gauss)	Minimum T_c (°C)	Impedance (Ω)(min)
27	850	2,750	130	104
28	850	2,750	130	73
29	250	2,200	210	57
30	2,500	4,000	160	35
31	850	2,750	130	64
32	2,000	4,600	200	34.2
33	850	2,750	130	35
34	850	2,750	130	200
35	1,000	3,800	150	38
36	250	3,300	250	33

4. QUALITY ASSURANCE PROVISIONS

4.1 Quality conformance inspection.

4.1.1 Inspection of product for delivery. Inspection of product for delivery shall consist of the group A inspection.

4.1.1.1 Group A inspection. Group A inspection shall consist of the inspections specified in table II in the order shown.

TABLE II. Group A inspection.

Inspection	Requirement paragraph	AQL (percent defective)	
		Major	Minor
Visual and mechanical inspection		2.5	4.0
Dimension	3.1.1		
Impedance	3.4.1		

4.1.1.1.1 Sampling plan. Statistical sampling and inspection shall be in accordance with MIL-STD-105, general inspection level II. The Acceptable Quality Level (AQL) shall be as specified in table II herein. Major and minor defects shall be as specified in MIL-STD-105.

4.1.1.1.2 Rejected lots. If an inspection lot is rejected, the contractor may rework it to correct the defects, or screen out the defective units, and resubmit for reinspection. Resubmitted lots shall be inspected using tightened inspection. Such lots shall be separate from new lots, and shall be clearly identified as reinspected lots.

4.1.2 Certification. The acquiring activity, at its discretion, may accept a certificate of compliance with group A requirements in lieu of performing group A inspection (see 6.2).

4.1.3 Inspection of packaging. The inspection of commercial packaging shall be as specified in the contract or purchase order (see 6.2).

5. PACKAGING

5.1 Packaging requirements. The requirements for packaging shall be as specified in the contract or purchase order.

6. NOTES

6.1 Intended use. Devices conforming to this drawing are intended for use when military specifications do not exist and qualified military devices that will perform the required function are not available for OEM application.

6.2 Ordering data. The contract or purchase order should specify the following:

a. Complete part number (see 1.2).

b. Requirements for delivery of one copy of the quality conformance inspection data with each shipment of parts by the manufacturer (when applicable, see 4.1.2).

c. Whether the manufacturer performs the group A inspection or provides a certificate of compliance with group A requirements.

d. Requirements for notification of change of product to procuring activity, if applicable.

e. Requirements for packaging and packing.

6.3 Replaceability. Devices covered by this drawing will replace the same commercial device covered by a contractor-prepared specification or drawing.

6.4 Suggested sources of supply. Suggested sources of supply are listed herein. Additional suggested sources of supply will be added as they become available. For assistance in the use of this drawing, contact DESC-E, 1507 Wilmington Pike, Dayton, OH 45444, or telephone (513)296-6511.

DESC drawing part number	Similar vendor part number 1/		
84127-	34899	54841	02114
01	2673004501	CFSB-01	
02	2673004601	CFSB-02	
03	2673004701	CFSB-03	
04	2643004801	CFSB-04	
05	2643002201	CFSB-05	
06	2673002201	CFSB-06	
07	2673000501	CFSB-07	
08	2643000201	CFSB-08	
09	2673000201	CFSB-09	
10	2673004901	CFSB-10	
11	2643004101	CFSB-11	
12	2643004201	CFSB-12	
13	2643000401	CFSB-13	
14	2643000101	CFSB-14	5659065/3B

See footnote at end of table.

DESC drawing part number 84127-	Similar vendor part number 1/		
	34899	54841	02114
15	2643000601	CFSB-15	
16	2673000601	CFSB-16	
17	2643000301	CFSB-17	
18	2654000301	CFSB-18	
19	2673000301	CFSB-19	
20	2643000701	CFSB-20	
21	2664000701	CFSB-21	
22	2673000701	CFSB-22	
23	2643000301	CFSB-23	
24	2643001501	CFSB-24	K500100/3B
25	2643022401	CFSB-25	
26			5659065/4A
27	2643021801	CFSB-27	
28	2643000801	CFSB-28	
29	2654000801	CFSB-29	
30	2673000801	CFSB-30	
31	2643006301	CFSB-31	
32	2677006301	CFSB-32	
33	2643002401	CFSB-33	
34	2643540001	CFSB-34	
35			5659065/4A6
36			5659065/4B

1/ CAUTION. Do not use this number for item acquisition and marking. The similar vendor part number may not satisfy the performance requirements of this drawing.

Vendor FSCM number	Vendor name and address
54841	Capcon, Incorporated 147 West 25th Street New York, NY 10001
34899	Fair-Rite Products Corporation 1 Commercial Row Wallkill, NY 12589
02114	Ferroxcube 5083 Kings Highway Saugerties, NY 12477